

**BENCH MARK DESCRIPTIONS
AND ELEVATIONS
JENNINGS COUNTY (taken from page 23)**

Complete Document is located at:
http://www.in.gov/dnr/water/comm_assistance/benchmarks/pdf/jennings.pdf

USGS RM 1 BUTLERVILLE GAGE

In Jennings County, Indiana, 4.9 miles northeast of North Vernon, 2.2 miles northwest of Butlerville, 0.6 mile west along a narrow gravel road from the Muscatatuck State School Power House, 400 feet north of the gravel road, at a USGS concrete gaging station shelter, 30 feet east (30 feet upstream) and 5 feet streamward to the northeast corner of the recorder shelter, 5 inches above the ground, a standard USGS bronze "Stream Gaging Station Marker", not stamped. **680.891**

BM JEN 4 and USGS RM 1 BRUSH CREEK

In Jennings County, Indiana, about 5.6 miles northeast of North Vernon, at the Muscatatuck State School, at the earth fill water supply dam on Brush Creek, on the top of the dam, on the gage and valve house well, on the top of the northwest corner of the concrete well, a standard Indiana Flood Control and Water Resources Commission bronze bench mark tablet, stamped "JEN 4 1953". **729.382**

USGS RM 4

In Jennings County, Indiana, about 5.6 miles northeast of North Vernon, at the Muscatatuck State School, at the earth fill water supply dam on Brush Creek, at the south end of the dam, 60 feet east of the centerline of the dam, 4 feet below the top of the dam, a ¾-inch square concrete post projecting 2 feet above the ground, stamped "2". **726.472**

BM JEN And USGS RM 7 BRUSH CREEK

In Jennings County, Indiana, about 5.6 miles northeast of North Vernon, at the Muscatatuck State School, at the earth fill water supply dam on Brush Creek, 150 feet west of the base of the earthen dam, on the concrete Columbus Deep Notch control dam, on the northwest end of the northwest wingwall of the concrete dam, a standard Indiana Flood Control and Water Resources Commission bronze bench mark tablet, stamped "JEN 5 1953". **688.821**

STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF WATER

BRUSHCK

PRIMARY SURVEY CONTROL DATA

PROJECT DATA

Station Code and No. BCK 2
Project Name: BRUSH CREEK RESERVOIR County: JENNINGS Civil Twp: _____
Sec. NE 1/4 16 Twp. 7N Ran. 9E, 2ND P.M. USGS 7.5' Quad: BUTLERVILLE
Agency Established by: INDIANA DEPARTMENT OF NATURAL RESOURCES Date: 1989
Agency Recovered by: _____ Date: _____

ELEVATION DATA (N.G.V.D. 1929): 2ND ORDER

Elevation: 730.082 Feet. 222.5294 Meters

POSITION DATA (N.A.D. 1983):

Geodetic Position: $\phi =$ _____' _____" $\lambda =$ _____° _____' _____"

INDIANA STATE PLANE COORDINATES IN U.S. SURVEY FEET (one meter = 39.37 inches exactly)
State Plane Coordinates: EAST Zone, Easting: 368,305.5010 Northing: 1,387,039.812

AZIMUTH DATA:

Mark Name	Geodetic Azimuth	Grid Azimuth	Grid Distance (feet)
<u>BCK 1</u>	_____° _____' _____"	<u>162° 08' 59"</u>	<u>391.280</u>
_____	_____° _____' _____"	_____° _____' _____"	_____
_____	_____° _____' _____"	_____° _____' _____"	_____

DESCRIPTION OF MONUMENT, ROUTE TO STATION, AND REFERENCE MARKS

The station is located at the North end of the Brush Creek Reservoir Dam. A standard Indiana Department of Natural Resources bronze control station tablet stamped " BCK 2 1988 ". Set in a concrete post about flush with the ground. Set in the approximate centerline of the dam.

10.6 feet Easterly of a utility pole.

31.0 feet Westerly of a standard Indiana Flood Control and Water Resources Commission bronze control station tablet stamped " JEN 1953 ".

31.0 feet Westerly of the Southwest corner of the gaging station building.

49.3 feet South of the toe of slope of a hill at the North end of the Dam.

BRUSHCK

STATE OF INDIANA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF WATER

PRIMARY SURVEY CONTROL DATA

PROJECT DATA Station Code and No. BCK 1
Project Name: BRUSH CREEK RESERVOIR County: JENNINGS Civil Twp: _____
Sec. NE 1/4 16 Twp. 7N Ran. 9E, 2ND P.M. USGS 7.5' Quad: BUTLERVILLE
Agency Established by: INDIANA DEPARTMENT OF NATURAL RESOURCES Date: 1989
Agency Recovered by: _____ Date: _____

ELEVATION DATA (N.G.V.D. 1929): 2ND ORDER
Elevation: 730.888 Feet. 222.7751 Meters

POSITION DATA (N.A.D. 1983):
Geodetic Position: $\phi =$ _____' _____" $\lambda =$ _____° _____' _____"
INDIANA STATE PLANE COORDINATES IN U.S. SURVEY FEET (one meter = 39.37 inches exactly)
State Plane Coordinates: EAST Zone, Easting: 368,425.4492 Northing: 1,386,667.342

AZIMUTH DATA:

Mark Name	Geodetic Azimuth	Grid Azimuth	Grid Distance (feet)
<u>BCK 2</u>	_____° _____' _____"	<u>342° 08' 59"</u>	<u>391.280</u>
_____	_____° _____' _____"	_____° _____' _____"	_____
_____	_____° _____' _____"	_____° _____' _____"	_____

DESCRIPTION OF MONUMENT, ROUTE TO STATION, AND REFERENCE MARKS

The station is located at the south end of Brush Creek Reservoir Dam. A standard Indiana Department of Natural Resources bronze control station tablet stamped " BCK 1 1988 " set in a concrete post, about flush with the ground.

44.7 feet Northerly of a twin trunked Tulip tree.

54.2 feet Southwesterly of an old gate post.

80.2 feet Westerly of a Railroad spike in a 36 inch Oak tree.

110.8 feet Southwesterly of a concrete fence post.